# CALIFORNIA ENERGY COMMISSION

WILLIAM J. KEESE, CHAIRMAN 1516 NINTH STREE T - MS-32 SACRAMENTO, CA 95814-5512 Telephone (916) 654-5000 Telefax (916) 654-4420

July 23, 2002

Mr. Scott Busa FPL Company 700 Universe Boulevard Juno Beach, Fl. 33408-0420

# Re: TESLA POWER PLANT – 3<sup>rd</sup> ROUND OF DATA REQUESTS NUMBERING CORRECTION

Dear Mr. Busa:

Due to an oversight the numbering sequence for the third set of data requests started at number 206. This numbering sequence did not reflect the second set of data requests that ended with number 288. The third set of data requests should start at 289, not 206. Enclosed is the third round of data requests reflecting the correct numbering sequence. Please refer to this document in your written responses on or before August 23, 2002.

If you are unable to provide the information requested, need additional time to provide the information, or object to providing it, then please send a written notice to both the Committee and me within 10 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time, and the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please contact me at (916) 654-3929 or at jcaswell@energy.state.ca.us.

Sincerely,

Jack W. Caswell Energy Facility Siting Project Manager

## **Enclosure**

cc: Docket (01-AFC-21)

Scott Galati, Grattan & Galati Lida Moussavian, Foster Wheeler Technical Area: Air Quality **Author**: Brewster Birdsall

#### BACKGROUND

An Air Quality Mitigation Agreement between the applicant and the SJVAPCD was docketed at the CEC June 5, 2002, too late for previous rounds of Data Requests. The applicant's responses to the previous rounds of Data Requests (submitted to CEC, March 8 and May 17, 2002) were incomplete. In Response to Data Request #11, the applicant indicated that it was developing a mitigation scheme for impacts to PM<sub>10</sub> concentrations caused by new emissions of SOx. At this time, a SOx mitigation plan has not yet been outlined. In Response to Data Request #207, the applicant identified that payment of an air quality mitigation fee to the SJVAPCD would be used for creating air quality benefits, but did not provide any specific mitigation program and did not discuss what benefits might occur.

- 289. Please provide a specific mitigation plan for impacts to PM<sub>10</sub> concentrations caused by SOx emissions. This is a follow-up to Data Request #11. Impacts from TPP SOx emissions are not addressed by the SJVAPCD Mitigation Agreement or the offset package for compliance with BAAQMD Rule 2-2-303.
- 290. Please provide a specific air quality benefits analysis that could be achieved with the SJVAPCD Mitigation Agreement. This is a follow-up to Data Request #207. The Mitigation Agreement states that use of the Air Quality Mitigation Fee by the SJVAPCD will create real time air quality benefits. The anticipated benefits need to be outlined, perhaps with assistance of the SJVAPCD, in order for staff to determine if this proposal can be characterized as a viable mitigation measure. For example, a projection of the approximate number of buses to be retrofit or lawnmowers to be replaced, the specific locations of these mitigation programs, the quantities and types of emission reductions that would be generated, and the schedules for these mitigation programs needs to be provided.

Technical Area: Cultural Resources

**Authors**: John Dougherty and Mary Maniery

#### BACKGROUND

The Pacific Intertie extra high voltage (EHV) lines, transmitting power from the Columbia River to Southern California are considered a major breakthrough in electrical engineering. The EHV lines and substation directly south of the Tesla Substation appear to be original components of the achievement. As significant engineering achievements, these facilities may qualify as important resources under CRHR although they are less than 50 years in age.

#### **DATA REQUEST**

- 291. Please provide a copy of a Department of Parks and Recreation (DPR) 523A (1/95), primary form for the EHV lines and associated substation.
- 292. Please evaluate the effect of the project upon this segment and the overall EHV lines and associated substation. If necessary to determine the impacts, evaluate this segment and the overall EHV lines and associated substation using the California Register of Historical Resources criteria.

#### **BACKGROUND**

The Tesla Substation is 45 years or more in age. As such it should be evaluated for eligibility for listing in the California Register of Historic Resources (CRHR).

## **DATA REQUEST**

- 293. Please provide a copy of DPR 523 (1/95) forms recording the Tesla Substation.
- 294. Please evaluate the Tesla Substation for CRHR eligibility, providing a context discussing the Tesla Substation's role in the development of an energy infrastructure in California.
- 295. If the Tesla Substation is determined to be an eligible resource, please determine whether the project will have an effect upon the resource.

## **BACKGROUND**

The Haera-Brockman Ranch is of an historic age and is also one of the few remaining structures representing the original community of Midway.

#### **DATA REQUEST**

296. Please provide a copy of a primary record of the Haera-Brockman ranch. Use the State of California DPR 523A form (1/95).

#### BACKGROUND

The Central Pacific Railroad (CPRR) grade is an historically important property in California. The grade represents the completion of a nationally important effort to link the east and west coasts of the continent. The grade is critical to the development of the San Francisco Bay area, to Sacramento, and to the development of various towns along the route. Project construction plans indicate that two elements of the project will physically affect portions of the CPRR grade.

#### **DATA REQUEST**

- 297.Please provide a copy of a DPR 523B BSO record form (1/95) of the stone bridge or culvert over Patterson Run as an element of the CPRR grade using a California State DPR 523B BSO record form.
- 298. Please provide an assessment of project-related impacts to the CPRR grade and its engineering elements, including the stone culvert or bridge over Patterson Run.
- 299. Please describe the construction methods proposed for crossing the CPRR grade at Midway Road and for the natural gas pipeline crossing, and also describe methods for installing the proposed gas and water lines.
- 300. Please describe proposed measures to mitigate any project-related effects on the CPRR grade and related features.

#### BACKGROUND

The Delta-Mendota Canal is considered an engineering achievement of historic importance in the development of California. Segments are considered eligible for the National Register of Historic Places and for the CRHR.

## **DATA REQUEST**

- 301. Please describe the construction methods proposed for crossing the Delta-Mendota Canal and the depth of the bore.
- 302. Please provide an assessment of project-related impacts to the Delta-Mendota Canal.
- 303. Please describe proposed measures to mitigate any project-related effects on the Delta-Mendota Canal.

## BACKGROUND

As part of the process of project planning, records of all historic and prehistoric resources that could be affected by the project are required by staff to properly evaluate project effects. Under some conditions, appropriately completed records on proper state forms may be considered as adequate mitigation of project effects. Also, in response to Data Request, March 8, 2002, the applicant states that all records have

been submitted to the Northwest Information Center (NWIC) of the California Historical Resource Information System.

## **DATA REQUEST**

- 304. Please provide a list of all primary numbers and trinomials issued by the NWIC for newly recorded resources with copies of NWIC transmittal letters.
- 305. Please provide copies of primary and ancillary records of all resources recorded for the present project on State of California DPR 523 forms (1/95).
- 306. Please verify that all data field numbers and data field names on all site forms recorded for the project match the data field numbers and data field names as defined in the "Instructions for Recording Historic Resources."
- 307. Please verify that all "required" fields on site forms are marked appropriately, as shown in the "Instructions for Recording Historic Resources."

#### **BACKGROUND**

The "Instructions for Recording Historic Resources" requires overall dimensions for all sites to be in meters (SI units). Standard U.S. measurements may be employed as supplemental information and for measurements of specific features.

## **DATA REQUEST**

308. Please provide all site dimensions in records in compliance with state standards as defined by the "Instructions for Recording Historic Resources."

#### **BACKGROUND**

Site A appears to be a potentially eligible resource under CRHR Criterion 4. The applicant indicated that eleven items were retained from the materials that were excavated and examined.

#### **DATA REQUEST**

309. Please provide a copy of an inventory of the collected materials from Site A.

## **BACKGROUND**

The cut-stone masonry culvert over Patterson Run is typical of the engineering methods and design characteristic of the Central Pacific Railroad as recorded elsewhere in California. This feature should be noted and discussed in any record or discussion of the CPRR / SPRR grade in the Midway / Tesla vicinity. While the applicant has prepared a record for the CPRR / SPRR, they submitted a separate primary record for the culvert and no mention of this feature is made in the CPRR/SPRR record. This piece of original engineering should be described and discussed in the description section of the primary record for the CPRR / SPRR grade (see pp. 6-7, Instructions for

Recording Historical Resources, Office of Historic Preservation, March 1995), and a BSO record of the feature should be appended to the record of the CPRR / SPRR grade.

- 310. Please prepare a State of California DPR 523B BSO (1/95) form for the Patterson Run culvert and append it to the CPRR / SPRR record.
- 311.Please include a thorough description of the CPRR / SPRR grade in the project vicinity. This should describe the grade, construction methods, variation in height and size, and all salient features such as culverts, switches, flags etc. associated with the construction and use of the grade by the railroad.

Technical Area: Hazardous Materials Author: Alvin Greenberg, Ph.D. Technical Senior: Rick Tyler

#### **BACKGROUND**

Hazardous materials will be delivered to the power plant during operations. In order to evaluate the potential for impacts in the surrounding community, staff must have information on the number of deliveries.

- 312.Please list the <u>total</u> number of hazardous materials deliveries expected on a weekly, monthly, and annual basis. Include a break-down of deliveries into the following categories for any material listed in AFC Table 3.4-17:
  - 1. Tanker trucks carrying >1000 gallons of liquid hazardous materials.
  - 2. Tanker trucks carrying <1000 gallons of liquid hazardous materials.
  - 3. Trucks delivering carboy's or 55-gal drums of liquid hazardous materials.
  - 4. Trucks delivering compressed gas cylinders.
  - 5. Trucks delivering solid hazardous materials in any amount.

Technical Area: Land Use **Author**: Mark Hamblin

#### **BACKGROUND**

The project-site is a portion of a 160 acre property within Alameda County Agricultural Preserve No. 72-42 that is currently under Land Conservation Contract (Williamson Act Contract) No. 72-26427.

On May 20, 2002 applicant submitted a letter to the Alameda County Community Development Department requesting a rescission from the Williamson Act contract for the site. On July 3, 2002, the applicant verbally informed staff that they are reconsidering their rescission request filed in May. The new direction discussed by the applicant is to request a cancellation from the Williamson Act contract instead of a partial rescission of the project-site contract.

Staff is proceeding to prepare a PSA analysis of the project based on the applicant's docketed letter requesting a rescission of the Williamson Act contract.

## **DATA REQUEST**

313. Please provide an explanation of why the applicant is requesting a cancellation rather than the original recission from the Williamson Act contract. Also provide a list of the processes and events the applicant believes are necessary to complete the cancellation request, and an estimated time schedule for this cancellation process.

Technical Area: Transmission System Engineering Authors: Ajoy Guha, P. E. and Al McCuen

# **BACKGROUND**

Staff needs a complete interconnection study to analyze potential impacts to reliability and to identify the interconnection facilities and any new and/or modified downstream facilities necessary to support interconnection of the Tesla Power Project (TPP) to the Pacific Gas and Electric (PG&E) system.

After reviewing the System Impact/Facilities Study reports by PG&E dated December 14, 2001, May 10, 2002 and June 20, 2002, and the Cal-ISO letter of January 24, 2002 to PG&E, and as discussed in the June 13, 2002 workshop, staff observes the following:

- 1. Re-rating the Contra Costa-Delta Switching Yard-Tesla 230 kV lines to 4 feet/second wind rating should be considered first before a selecting Special Protection System (SPS) to reduce the amount of TPP generation.
- Mitigation measures were not considered and selected by PG&E for the overloaded lines under Category B & C contingencies (refer to Tables 1 & 2 in June 20, 2002 SIS report) for 2004 Spring Peak case.
- 3. Power Flow studies for N-1 and N-2 contingencies in all the 230 kV lines connected to the Tesla substation were not conducted.
- 4. Power Flow studies for N-1 contingencies in the 500 kV lines connected to the Tesla substation and other critical contingencies were not conducted.
- 5. Power Flow studies for the 500 kV double line outages or 500 kV Bus faults were not conducted. These studies are necessary to determine if the TPP should be included in Remedial Action Schemes (RAS) and/or Special Protection Systems (SPS).
- 6. Sensitivity studies are necessary in consideration of the Path 15 upgrade plan including a new Gates-Los Banos 500 kV line (expected date of completion by October 2004), for high/low Path 15 and Path 26 flows, to determine full system impacts, appropriate mitigation plans and/or SPS.

- 314. Provide the following supplemental System Impact Study report prepared by PG&E, the Transmission Owner (TO). Analyze the system with and without the proposed plant of 1156 MW nominal output, and include all system impacts and mitigation alternatives considered and then <u>selected</u> for 2004 summer peak, summer off-peak, winter off-peak and spring peak system conditions.
  - A. Analyze the system for Power Flows with the 2004 summer peak base case for the following conditions:

- Single (N-1) and double (N-2) contingencies as listed below for the 230 kV lines connected to the Tesla Substation. If prudent include other critical 230 kV contingencies close to the Tesla Substation for the study.
  - a. Tesla-Tracy#1 line.
  - b. Tesla-Tracy#2 line.
  - c. Tesla-ADCC line.
  - d. Tesla-Delta Switching Yard line.
  - e. Tesla-Pittsburg #1 line.
  - f. Tesla-Pittsburg#2 line.
  - g. Tesla-Kelso line.
  - h. Tesla-Westley and Tesla-Bellota lines.
  - i. Tesla-Bellota and Tesla-Weber lines.
  - j. Tesla-Weber and Tesla-Stagg lines.
  - k. Tesla-Stagg and Tesla-Eight Mile Road lines.
  - I. Tesla-Eight Mile Road and Tesla-Newark lines.
  - m. Tesla-Newark and Tesla-Tracy#1 lines.
  - n. Tesla-Tracy#1 and 2 lines.
  - o. Tesla-Tracy#2 and Tesla-ADCC lines.
  - p. Tesla-ADCC and Tesla-Delta Switching yard lines.
  - q. Tesla-Delta Switching yard I and Tesla-Pittsburg#1 lines.
  - r. Tesla-Pittsburg#2 and Tesla-Kelso lines.
  - s. Tesla-Kelso and Tesla-Ravenswood lines
  - t. Tesla-Ravenswood and Tesla-Westley lines.
- 2) Single (N-1) and double (N-2) contingencies as listed below for the 500 kV lines connected to the Tesla Substation, 500/230 kV transformers (for N-2) and 500 kV Bus faults at the Tesla Substation. If prudent include other critical 500 kV contingencies close to the Tesla Substation for the study.
  - a. Tesla-Table Mountain line.
  - Tesla-Vaca Dixon line.
  - c. Tesla-Tracy line.
  - d. Tesla-Metcalf-line.
  - e. Tesla-Los Banos line.
  - f. Tesla-Table Mountain and Tesla-Vaca Dixon lines.
  - g. Tesla-Vaca Dixon and Tesla-Tracy lines.
  - Tesla-Tracy and Tesla-Metcalf lines.
  - i. Tesla-Metcalf and Tesla-Los Banos lines.
  - j. Tesla-Los Banos and Tesla-Table Mountain lines.
  - k. Tesla 500/230 kV transformers#2 and 4.
  - I. Tesla 500/230 kV transformers#4 and 6.
  - m. Tesla 500/230 kV transformers#6 and 2.
  - n. Tesla 500 kV Bus, section#1 or #2 fault.

Provide a list of overload criteria violations (including pre-project overloads if any) in one table showing the loadings before and after the new generation and their differences side by side.

- B.1) 1) a. Analyze the system for Power Flows with the 2004 spring peak base case (with inclusion of two units at Helm in generation mode) for the contingencies as stated above in Item 1.A.
  b. List mitigation measures considered and selected for the overloaded lines under Category B & C contingencies for 2004 Spring Peak case.
  - 2) Analyze the system for Power Flows with the summer off-peak case for the contingencies as stated in Item 1.A above.
  - 3) Analyze the system for Power Flow studies with the winter off-peak base case for 500 kV major Path flows (Path 66 and/or Path 15) in the South to North direction under the contingencies as stated in Item 1.A above. In all studies consider established transmission line ratings according to seasons. Provide a list of overload criteria violations (including pre-project overloads if any) in one table showing the loadings before and after the new generation and their differences side by side.
- C. Considering the Path 15 upgrade project, including a new Gates- Los Banos 500 kV line and upgrading of Gates-ARCO-Midway 230 kV lines, analyze the system impact (inclusion of a third 500/230 kV transformer bank, a PG&E project, at the Midway Substation is preferable) for Load Flows with the summer peak, summer off-peak, winter off-peak and spring peak base cases for N-0, critical N-1 and N-2 system conditions including the contingencies as stated in Items 1.A above. In all studies consider established transmission line ratings according to seasons. Consider a few sensitivity case studies with higher/lower Path 15 and Path 26 flows. Provide a list of overload criteria violations (including pre-Project overloads if any) in one table showing the loadings before and after the new generation and their differences side by side.
- D. Per Item 1 in the Background above, reconsider and review the re-rating of the Contra Costa-Delta Switching Yard-Tesla 230 kV lines to 4 feet/second wind rating with PG&E and verify if the re-rating will likely be feasible before the on-line date of the TPP plant.
- E. List all mitigation measures considered in sequence including Special Protection System (SPS), operational solutions or upgrades and then selected for each criteria violation. Provide a letter stating that the mitigation measures or projects selected by PG&E are acceptable.
- F. Provide power flow diagrams (MVA, percent loading & P. U. voltage) for base cases with and without the project. Power flow diagrams must also be provided for all N-0, N-1 and N-2 studies where overload or voltage criteria violations appear.
- G. Provide a list of all contingencies evaluated for each supplemental study.
- H. Please provide electronic updated copies of the PSLF \*.sav & \*.drw files of the new base cases, and EPCL and/or AUTOCON contingency and comparison files.
- 315. For <u>any selected mitigation measure</u> that includes a new transmission line, reconductoring or modification of a linear transmission facility as may be identified in the supplemental SIS, please provide a description of the project and any associated environmental impacts.

Authors: Melinda M. Rivasplata, AICP, and Eric Knight

#### **BACKGROUND**

Based on the visual resources staff's conversation with the staff biologist, it is necessary to avoid or significantly minimize the amount of landscaping that would provide cover for predators and competitors of the San Joaquin kit fox. Trees are not endemic to the grassland habitats upon which this federally endangered and state threatened species depends. The addition of screening trees in the grasslands of the project area will degrade the grassland habitat for this species, while providing habitats suitable for its competitors and predators (e.g. red fox, coyote, golden eagle).

Appropriately placed trees along, and as close as possible to, Midway Road may be sufficient to reduce adverse effects of the visual impacts (at KOPs 1, 2, 3, and 7) of the project to acceptable levels and significantly minimize biological impacts. It is necessary to determine the edge of the clear zone (safety area at the edge of the travel way) in order for staff to conduct a line of sight analysis. The purpose of the analysis is to restrict landscaping to just those locations where the screening effect would be at the maximum.

An alternative to roadside landscaping at KOP 3 may be to improve the riparian vegetation along Patterson Run Creek. This creek passes between the TPP site and KOP 3, and the existing scattered riparian vegetation partially screens the TPP site. Therefore, an alternative strategy for reducing visual impacts at KOP 3 may be to restore and enhance the natural vegetation along the creek, creating a more effective visual screen. Restoration of the natural and existing riparian habitat in Patterson Run Creek would benefit the wildlife that depends upon that riparian habitat (e.g. California red-legged frog, songbirds). The placement of screening trees in the existing, natural, riparian area would also prevent the adverse impacts caused by placing the trees in the grassland habitat required by the San Joaquin kit fox.

- 316.On a topographic map at a scale of 1"=80', with a contour interval of one foot, please show the location of the roadway centerline, the edge of the travelway, the edge of the right-of-way (R/W), and the required setback (clear zone) from the edge of travel way along Midway Road on the east and northeast side of the TPP site for the locations adjacent to KOP 1 and KOP 7. The map should also show the location of KOPs 1 and 7, the TPP site, the proposed fence line, the cooling towers, HRSG units, and stacks. The setback calculations should be based on the design speed of the road using the Alameda County methodology for computing clear zone width (contact Bob Preston, Alameda County Traffic Engineering at 510-670-5480).
- 317.On a topographic map at a scale of 1"=200', with a contour interval of 5 feet, please show the location of the roadway centerline, the edge of the travelway, the edge of the R/W, and the required setback (clear zone) from the edge of travel way along Midway Road on the east and southeast side of the TPP site for the locations adjacent to KOP 2 and KOP 3. The map should also show the location of KOPs 2

- and 3, the TPP site, Patterson Run Creek, the proposed fence line, the cooling towers, HRSG units, and stacks. The setback calculations should be based on the design speed of the road using the Alameda County methodology for computing clear zone width.
- 318. Please discuss the feasibility of installing berms outside of the clear zone in the areas of KOPs 1, 2, 3, and 7 on which trees could be planted to increase their effective height and screening potential.
- 319. Please provide the following information about the feasibility of enhancing the natural vegetation in the riparian zone along Patterson Run Creek, in order to provide visual screening for KOP 3.
  - a. After contacting the property owner, please provide a discussion of whether the owner would be willing to enter into an agreement to allow the restoration and enhancement of the creek area.
  - b. Please provide information on the types and height of existing vegetation along the creek.
  - c. Please address the feasibility of protecting the vegetation from cattle grazing and whether there would be a means of long-term maintenance of the vegetation either through a conservation easement or other means.

Technical Area: Waste Management

Author: Mike Ringer

Technical Senior: Mike Ringer

## **BACKGROUND**

The Phase I Environmental Site Assessment (ESA) recommends that the current owner of the property be interviewed to meet the Phase I ESA requirements of ASTM E1527-97. The interview with the owner should include confirmation of the following: no hazardous materials have been used, stored or buried on site; the tanker truck was solely used for the purposes of water storage; the truck's gas tank and oil reservoir are empty; and the depth of the water well. The ESA also recommends that the right-of-way of the former railroad should be determined to better understand the vicinity that herbicides, pesticides and other weed control agents may have been applied.

- 320. Please provide results of an interview with the current property owner based on the recommendations of the ESA as summarized above.
- 321. Please provide a description or map indicating the right-of-way of the former railroad in relation to the proposed project site.

Technical Area: Soil and Water Resources

Authors: Kristine Uhlman, John Kessler and Antonio Mediati

#### BACKGROUND

Staff has observed areas of accelerated erosion along drainage features in the area, and excessive downcutting and mass wasting is evident along Paterson Pass Road. Staff is concerned that the concentration of water discharged by the detention basin if not properly regulated for discharge and if not protected for scouring, will result in soil erosion and the formation of a watercourse channel between the detention basin and Patterson Run Creek where no channel currently exists. Figures 35-2 and 35-3 of Data Response 244 depict the new access road location and culvert undercrossing to provide drainage for water released from the detention basin.

As stated by the applicant in their <u>Supplementary Response to DR 245</u> "Water released from detention basin will then flow in a meandering manner through the plain grassy area generally in the southeast direction. When the water flow reaches the plant access road, the water will pass through the culverts provided under the road. The culvert locations will be such to spread the flow of water under the road avoiding a large concentrated flow and local surface scouring. After passing through the culverts, water will resume its natural course through the plain grassy area to Patterson Run Creek."

Based on the response to Data Request 244, the outlet valve to the storm water detention basin will be normally closed. Under conditions exceeding two consecutive 24-hour, 25-year storms, the detention basin could either spill uncontrollably and/or discharge could be regulated through the outlet. As a result of detaining inflow for some period before release or spill, the resulting discharge could exacerbate peak flows from both the site and in Patterson Run Creek.

- 322. As previously requested in Data Request 245, please identify the design features or management practices the Applicant will employ for preventing erosion from detention basin outflow and overflow beyond the immediate rock apron proposed currently. Please address BMP measures necessary to prevent erosion all the way to the confluence with Patterson Run Creek.
- 323. Please provide a topographic map of the area between the detention basin and Patterson Run Creek. Include the location of the new and existing road and culverts, proposed drainage facilities and erosion control BMPs and sufficient contour lines to determine the flow pattern of the released water.
- 324. In reference to Data Request 244, please describe the standard operating procedures proposed for regulating the detention basin outlet valve in which the Applicant has indicated would be normally closed. In particular, please address the criteria for determining when storm water inflow may exceed the capacity of the detention basin, such as when exceeding two 25-year, 24-hour events, and when the outlet would be opened. Based on this criteria, please provide the pre-

developed and developed discharges of storm water under a full range of 24-hour events for 5, 10, 25 and 100-year recurrences.

#### BACKGROUND

Geotechnical characterization of the site has partially been addressed in the AFC; however, several details need to be clarified. During the June 13<sup>th</sup> Workshop, the scope of pending geotechnical investigations were discussed and the Applicant requested clarification of the items requested by staff to complete the Staff Assessment. A number of responses to previous Data Requests are dependent on receipt of geotechnical data that has not been made available. In addition, staff is concerned about the potential for interception of ground water during excavation (specifically in the north western portion of the site where the depth of excavation approximates the depth to ground water) and the need for dewatering if water were to be encountered.

#### **DATA REQUEST**

- 325. As follow-up to Data Request 242 and 251, please submit geotechnical information that includes, but is not necessarily limited to:
  - a. Completion of drainage calculations; In support of these calculations, please provide flood and runoff modeling and analysis using the USACOE HEC-HMS 2 code.
  - b. The anticipated depth to ground water across the site, specifically in the north western portion of the site where the topography, geology, and drainage morphology suggests shallow ground water may be encountered.
  - c. A conceptual dewatering plan if water is encountered during project construction / excavation.
  - d. Calculations and description of the proposed septic system leach field location, size, and percolation rates.

### **BACKGROUND**

Applicant's response to Staff's Data Request 174 indicated that the on-site well "...will continue its current use or it will be sealed...." The current use is observed to consist of watering livestock, and is reported by the Applicant in response to Staff's Data Request 253 to likely be of value to continue in this use.

#### **DATA REQUEST**

326. Please clarify the Applicant's intentions with the future use of the well. It was verbally reported during the June 13th workshop that the windmill and well will continue to remain on site. The current condition of the wellhead is also of concern, with significant potential for impact to the shallow ground water with contaminants derived from livestock grouping around the wellhead. Please identify the changes to be made to the well and wellhead structures to allow continued use of the well that will be protective of the shallow ground water.

- 327. Please measure and report the current depth to ground water in the well. If accessible, please measure and report the total depth of the well.
- 328. Please sample and analyze the water obtained from the site well so as to establish existing (background) ground water quality conditions. The parameters to be analyzed should be similar to Table 3.4-15 please include bacteria.

#### **BACKGROUND**

The applicant proposes to receive fresh water for process and cooling as delivered from the California Aqueduct. After review of applicant's response to Data Request 254 and 255, staff believes that TPP could be subjected to periods of water supply interruption that greatly exceeds its onsite storage capacity of approximately 1 day at full load. During the June 13<sup>th</sup> Workshop, the applicant verbally reported that the TPP will still pump water out of the aqueduct during times of curtailment, and if the Banks pumping station is not operating, that Rosedale-Rio Bravo will supply backup water to the aqueduct in Kern County.

#### **DATA REQUEST**

- 329.Please clarify how Rosedale-Rio Bravo will supply backup water to support the TPP during curtailment or when the Banks Pumping station is not operating. Please differentiate between the contractual arrangement and physical action that must occur to fulfill the contractual arrangement.
- 330. Please clarify how Rosedale-Rio Bravo, or any other water provider, conveys water when the California Aqueduct is shutdown.
- 331. What is the average, minimum and maximum number of days per year the TPP is estimated to be shut down or curtailed due to lack of water? Please provide the calculations and assumptions used to develop the estimate.

# **BACKGROUND**

Data for considering alternative sources of water supply from either the CA Aqueduct or reclaimed sources from Livermore, Tracy, Mountain House Community Services District, or Discovery Bay has been previously provided in the AFC and in earlier Data Responses. Staff is also conducting an independent analysis of raw water supply costs and alternative sources. In support of the alternative water supply cost comparison, staff is using a fresh water purchase cost of \$400/AF. This value is based on discussions with the BVWSD and RRBWSD that indicate the approximate cost for purchase of fresh surface water from their banks range between \$350-\$500/AF. The Applicant has been using a fresh water purchase cost of \$150/AF based on a comparable rate from another water district.

#### **DATA REQUEST**

- 332. If reclaimed water were used for the TPP cooling and process needs, what are the alternatives and associated costs for supplying potable water to meet the TPP's 5 gpm average demand?
- 333. Please explain why the applicant used a purchase price of \$150/AF and provide the basis for any new information that may be provided.

#### **BACKGROUND**

In support of considering the environmental effects of the proposed fresh water supply to TPP, information for establishing the environmental baseline and proposed qualitative and quantitative changes from baseline under CEQA was previously requested under Data Request 192. The response to date provides some clarification, but staff continues to have questions on Applicant's responses to DRs 272 and 281. In addition, a number of Data Requests were verbally submitted during the June 6<sup>th</sup> Water Workshop requesting clarification on the Buena Vista / Rosedale-Rio Bravo Water Banking and Recovery Program for the TPP. These requests are repeated here:

## **DATA REQUEST**

- 334. Please provide information on Rosedale-Rio Bravo and Buena Vista's project water supply and demand, contractual obligations, and the amount of water being exported and available for export.
- 335. It is noted that the Rosedale-Rio Bravo 'RR Basin Balance Schematic 1996' (DR #274) and the Buena Vista 'BV Basin Balance Schematic 1996' (DR #279) are not comparable. In addition, the 'BV Basin' Schematic does not include sales to 3rd parties and surface banking in the Pioneer Project, Kern Bank, etc., whereas the 'RR Basin' Schematic does. Please provide a discussion of these two schematic such that a comparison between the two can be made.
- 336. Earlier documents (AFC and DR Response to 192) made reference to "2 for 1" banking in reference to the water being banked to support the TPP. Discussions with Rosedale and Buena Vista indicate that this is no longer the proposal. Please clarify the proposal. Include the amount of water to be banked and the timing or circumstances for the release of all the water.
- 337. It is understood that the Kern Fan Monitoring Committee generates regular reports. Please provide copies of the executive summaries and maps of water table elevations and hydrographs of monitoring wells for the past five years.

# **BACKGROUND**

The Applicant proposes to construct a new turnout from the California Aqueduct in Zone 7 to supply water to the project.

# **DATA REQUEST**

338. Please provide the proposed construction and dewatering plan and schedule for the new turnout including applicable design criteria the facility must meet and any mitigation proposed to minimize impacts to SWP operations in the California Aqueduct?